IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant: Dan Kikinis

Title: REMOTE PROXYSERVER AGENT

Appl. No.: 10/037,842

Filing Date: 1/2/2002

Examiner: Peling Andy Shaw

Art Unit: 2444

Conf. No.: 6723

REPLY BRIEF

Mail Stop Appeal Brief - Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir/Madam:

This Reply Brief is being filed in response to an Examiner's Answer mailed December 28, 2010, maintaining the rejection of Claims 103-135. As a result, this Reply Brief is timely filed under the provisions of 37 C.F.R. § 41.41. Appellant does not believe that a fee is due for this filing. If this fee is deemed to be insufficient, authorization is hereby given to charge any deficiency (or credit any balance) to the undersigned deposit account 19-0741.

Appellant hereby respectfully requests reconsideration of the Application and reversal of the various pending rejections by the Board.

STATUS OF CLAIMS

Claims 103-135, which are attached hereto as an appendix, are currently pending in this application and stand rejected. Claims 1-102 have been canceled. Claims 103-135 are the subject of this appeal.

GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Three grounds of rejection are presented for review in this appeal:

- (1) Whether Claims 103, 104, 106, 107, 109-112, 114, 115, 117, 118, 120-123, 125, 126, 128, 129, and 131-134 are anticipated by U.S. Patent No. 6,324,648 to Grantges under 35 U.S.C. § 102(e);
- (2) Whether Claims 105, 116, and 127 are unpatentable over U.S. Patent No. 6,324,648 to Grantges in view of U.S. Patent Application Publication No. 2002/0118671 to Staples et al. under 35 U.S.C. § 103(a); and
- (3) Whether Claims 108, 113, 119, 124, 130, and 135 are unpatentable over U.S. Patent No. 6,324,648 to Grantges in view of U.S. Patent No. 6,711,611 to Hanhan under 35 U.S.C. § 103(a).

ARGUMENT

I. LEGAL STANDARDS UNDER 35 U.S.C. 102(e)

35 U.S.C. § 102(e) provides that "a person shall be entitled to a patent unless ... the invention was described in - (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent...." A prior art reference, as defined by 35 U.S.C. 102, is said to "anticipate" a claimed invention if each and every element of the claimed invention is disclosed, either expressly or inherently, in the prior art reference. *In re Spada*, 911 F.2d 705, 708, 15 U.S.P.Q.2d 1655, 1657 (Fed. Cir. 1990). In deciding the issue of anticipation, one must identify the elements of the claims, determine their meaning in light of the specification and prosecution history, and identify corresponding elements disclosed in the allegedly anticipating reference. *Lindemann Maschinenfabrik v. American Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 221 U.S.P.Q. 481, 485-86 (Fed. Cir. 1984).

The Federal Circuit explained the requirements for anticipation in *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 U.S.P.Q. 781 (Fed. Cir. 1983), by stating:

The law of anticipation does not require that the reference "teach" what the subject patent teaches. Assuming that a reference is properly "prior art," it is only necessary that the claims under attack, as construed by the court, "read on" something disclosed in the reference, i.e., all limitations of the claim are found in the reference, or "fully met" by it.

Id. at 772, 218 U.S.P.Q. at 789.

Extrinsic evidence from those skilled in the art can be used to explain, but not to expand the meaning of a disclosed element in that single prior art reference, to determine whether the reference anticipates the claims at issue. *In re Baxter Travenol Labs.*, 952 F.2d 388, 21 U.S.P.Q.2d 1281 (Fed. Cir. 1991).

II. LEGAL STANDARDS UNDER 35 U.S.C. § 103(a)

35 U.S.C. 103(a) states:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Obviousness under 35 U.S.C. 103(a) involves four factual inquiries: (1) the scope and content of the prior art; (2) the differences between the claims and the prior art; (3) the level of ordinary skill in the pertinent art; and (4) secondary considerations, if any, of nonobviousness. See Graham v. John Deere Co., 383 U.S. 1 (1966).

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. *In re Piasecki*, 745 F.2d 1468, 1471-72 (Fed. Cir. 1984).

According to M.P.E.P. § 706.02(j),

35 U.S.C. 103 authorizes a rejection where, to meet the claim, it is necessary to modify a single reference or to combine it with one or more other references. After indicating that the rejection is under 35 U.S.C. 103, the examiner should set forth in the Office action:

- (A) the relevant teachings of the prior art relied upon, preferably with reference to the relevant column or page number(s) and line number(s) where appropriate,
- (B) the difference or differences in the claim over the applied reference(s),
- (C) the proposed modification of the applied reference(s) necessary to arrive at the claimed subject matter, and
- (D) an explanation >as to< why >the claimed invention would have been obvious to< one of ordinary skill in the art at the time the invention was made**.

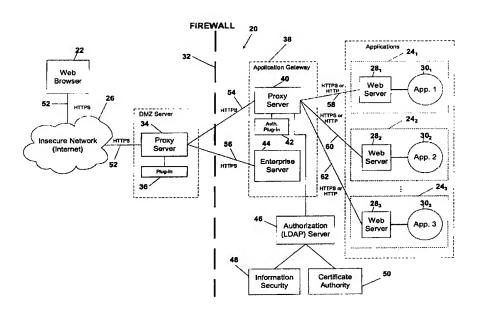
** "To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references." *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985).

III. REJECTION OF CLAIMS 103, 104, 106, 107, 109-112, 114, 115, 117, 118, 120-123, 125, 126, 128, 129, and 131-134 UNDER 35 U.S.C. § 102(e)

On page 5 of the Final Office Action, Claims 103, 104, 106, 107, 109-112, 114, 115, 117, 118, 120-123, 125, 126, 128, 129, and 131-134 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,324,648 to Grantges (hereinafter "Grantges"). Appellant respectfully requests the Board reverse the rejection. In addition, to the various arguments presented in the previous Appeal and Reply Briefs, Appellant respectfully requests consideration of the arguments below.

Independent Claim 103 recites, in part, a "firewall system interposed between a first system and a second system." Claim 103 further recites that the "first system comprises a gateway [that] comprises an instance of a remote gateway agent" and that the "second system comprises a processing system [that] comprises an instance of a remote proxy agent." In addition, Claim 103 recites that "the remote gateway agent is configured for: receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent." (Emphasis added). Although different in scope, independent Claims 114 and 125 recite similar elements. Grantges fails to disclose such a combination of elements.

On page 6 of the Examiner's Answer, the Examiner apparently analogized the "DMZ server" of Grantges to the claimed "gateway compris[ing] an instance of a remote gateway agent" (see lines 1-4) and further analogized the "web servers 28₁ ... 28₃" of Grantges to the claimed "remote proxy agent" (see lines 6-8). Figure 1 of Grantges is illustrated below for convenience:



On page 6 of the Examiner's Answer, the Examiner cited column 4, lines 23-65 and column 7, lines 28-62 of Grantges as allegedly disclosing the element "the remote gateway agent is configured for receiving ... a client registration request from the remote proxy agent," as claimed. Accordingly, in view of the Examiner's interpretation of the "DMZ server" and the "web servers 28₁ ... 28₃" as discussed above, the Examiner apparently contends that Grantges discloses a client registration request sent from the "web servers 28₁ ... 28₃" to the "DMZ server." Appellant respectfully disagrees and asserts that the Examiner mischaracterizes the plain teachings of Grantges in asserting the present rejection.

In Section 1 of the "Response to Argument" section on pages 13-14 of the Examiner's Answer, the Examiner cited numerous sections of Grantges in support of the present rejection. Each of these recitations is addressed below.

On page 13 of the Examiner's Answer, the Examiner paraphrased column 4, lines 23-65 of Grantges as disclosing that:

[A] user access through a proxy server for authentication and authorization to select and access multiple applications from an options page presenting multiple choice, i.e. of applications. Here Grantges has taught or suggested that applications have been made known through the proxy server.

As such, the Examiner apparently asserted that Grantges teaches "applications [that] are made known through the proxy server." However, Grantges fails to provide any indication that a "client registration request" is sent from the "web servers 28₁ ... 28₃" of Grantges (which the Examiner has analogized to the claimed "remote proxy agent") to the "DMZ server" (which the Examiner has analogized to the claimed "remote gateway agent"). Merely disclosing that multiple applications may be accessed through a proxy server is not the same as disclosing "receiving [at a remote gateway agent on a first side of a firewall] a client registration request from [a] remote proxy agent [on a second side of a firewall]" and that the "client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as claimed.

On pages 13-14 of the Examiner's Answer, the Examiner further stated:

Grantges has described that a proxy server establishes secure connection with a gateway, i.e. applicant's remote proxy agent (see Grantges' Fig. 1 and column 7, lines 1-8). In fact, Grantges is quoted to have both a proxy server and web server in the same DMZ server; secure connection between DMZ server and application gateway (see Fig. 1, column 3, line 64-column 4, line 65).

As such, the Examiner asserted that Grantges discloses a connection between a "gateway" and the "remote proxy agent." However, merely because a "secure connection" is formed between two entities does not mean that a "client registration request" is sent between those two entities. Indeed, Grantges fails to disclose the communication of a "client registration request" across the Examiner's alleged "secure connection" between the "gateway" and the "remote proxy agent."

Column 4, lines 8-19 and 48-58 of Grantges states:

Computer system 20 is configured generally to provide access by user 18 of a client computer 22 to one of a plurality of software applications $24_1, 24_2, \ldots, 24_3$. Such access is over an insecure network 26, such as the publicly used Internet, to a private, secure network where applications $24_1, 24_2, \ldots, 24_3$ reside. Each application $24_1, 24_2, \ldots, 24_3$ includes a respective web server (hereinafter "destination server") $28_1, 28_2, \ldots, 28_3$, and an application program $30_1, 30_2, \ldots, 30_3$. Computer system 20 includes a firewall system 32, a proxy server 34 with a plug-in 36, an application gateway 38 comprising a gateway proxy server 40 with a plug-in 42 and a gateway web server 44, and an authorization server 46....

If authenticated at this level, proxy server 34 then sends the information contained in the client's digital certificate through firewall system 32 to gateway 38 to be authenticated at a second, more substantive level. The second level authentication involves examining the particulars of the X.509 digital certificate using the data stored on authorization server 46. If user 18 is authorized to access multiple applications, the next item after the "popup" message to be displayed to user 18 is an "options page", presenting the multiple choices.

Column 7, lines 1-8 of Grantges states:

Gateway proxy server 40 further performs well-known mapping functions, and, in accordance with the present invention, efficiently routes messages destined for various applications $24_1,\ 24_2,\ \ldots,\ 24_3$ to the appropriate one of the destination servers $28_1,\ 28_2,\ \ldots,\ 28_3$. Gateway proxy server 40 may comprise conventional apparatus known to those of ordinary skill in the art, such as, for example, Netscape proxy server software running on conventional hardware.

As such, Grantges discloses that an application request is sent from a client to the "DMZ server" which forwards the request through the "firewall system 32" to the "gateway proxy server 40." (See Fig. 1, column 4, lines 8-65). The "gateway proxy server 40" then routes the request to the appropriate "applications 24₁, 24₂, ..., 24₃" via "web servers 28₁, 28₂, ... 28₃." (See Grantges; column 7, lines 1-8).

However, Grantges fails to provide any indication that a "client registration request" is sent from the Examiner's alleged "remote proxy agent" (i.e., web servers 28₁, 28₂, ... 28₃") on a first side of the "firewall" to the "remote gateway agent" (i.e., the "DMZ server") on a second side of the "firewall." Disclosing that a request for an application is sent from a client through a gateway server to a proxy server is not the same as "receiving [at a remote gateway agent on a first side of a firewall] a client registration request from [a] remote proxy agent [on a second side of a firewall]" and that the "client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as claimed.

On page 14 of the Examiner's Answer, the Examiner further stated that:

Grantges has described in column 7, lines 28-62 that an authorization server comprises an LDAP-capable server and maintains the identification of applications to be accessed by the user. Grantges has also described in column 7, lines 1-8 that the gateway proxy server maps and routes messages destined for various applications; and in column 8, lines 53-65 DMZ server knows the URL of applications gateway proxy server. This indicates that the application must be made known to the proxy server and through which a user has an access to the applications.

However, once again, Grantges fails to provide any indication that a "client registration request" is sent from the Examiner's alleged "remote proxy agent" (i.e., web servers 28₁, 28₂, ... 28₃") on a first side of the "firewall" to the "remote gateway agent" (i.e., the "DMZ server") on a second side of the "firewall."

Nowhere does Grantges provide any indication that a "client registration request" or any information about the "applications" or "web servers 28₁, 28₂, ... 28₃" is sent from the "application gateway 38" to the "DMZ server."

Column 7, lines 34-43 of Grantges states, in part, "gateway proxy server 40 and authorization server 46 conduct messaging between each other" and that the "information obtained by the authorization server 46 includes ... the identification of applications 24₁, 24₂, ..., 24₃ to which access by the user 18 has been authorized by an application trustee." As illustrated in Fig. 1, the "gateway proxy server 40" and the "authorization server 46" are both located on the secured size of the "firewall system 32." However, Grantges fails to provide any indication that the various information obtained by the "authorization server 46" is communicated to the "DMZ server" or even that such information is communicated across the "firewall system 32."

Column 8, lines 60-65 of Grantges further states:

It bears emphasizing that <u>DMZ proxy server 34 only knows the URL of application gateway proxy server 40</u>, **not the URL of the destination servers**. Only the mapping information for the gateway proxy server 40, which is kept in a local configuration file (behind the firewall), provides the URL/addresses of the destination servers.

(Emphasis added). Accordingly, Grantges explicitly states that "DMZ proxy server 34" does not know the URL of the destination (i.e., the application servers). Instead, the "gateway proxy server 40" (on the secure side of the "firewall system 32") must route the request for an application (which is received from "DMZ proxy server 34" on the unsecured side of the "firewall system 32") to the appropriate application server. This further evidences the fact that Grantges fails to disclose a "client registration request" that is sent from the "remote proxy agent" across the firewall to the "remote gateway agent," as claimed. If a "client registration request" was sent from the "web servers 28₁ ... 28₃" of Grantges (which the

Examiner has analogized to the claimed "remote proxy agent") across the firewall to the "DMZ server" (which the Examiner has analogized to the claimed "remote gateway agent"), the mapping information of "gateway proxy server 40" would not be needed to route the application request to the appropriate application server because this information likely would already be known by the "DMZ server." However, because the "DMZ server" receives no information from the "web servers 28₁ ... 28₃" regarding the applications or the web servers themselves, the "DMZ server" must forward the application requests to the "gateway proxy server 40" so that the "gateway proxy server 40" may map the request to the appropriate "web servers 28₁ ... 28₃."

Finally, on page 14 of the Examiner's Answer, the Examiner stated that "in column 6, lines 37-66 of Grantges that application gateway is connected with DMZ proxy server for message passing in client's access to application through a firewall system." Column 6, lines 37-67 of Grantges states:

Application gateway 38 is disposed on the private network side of firewall system 32, between DMZ proxy server 34 and applications 24₁, 24₂, . . . , 24₃. Gateway 38 includes gateway proxy server 40 and gateway web server 44. Gateway proxy server 40 is configured to establish second secure connection 54 across firewall system 32 with DMZ proxy server 34. In one embodiment, secure connection 54 comprises an HTTPS connection, although other secure protocols may be employed as described above; provided, however, that both ends are compatible with such other protocol. In response to DMZ proxy server 34's request to establish secure connection 54, gateway proxy server 40 presents its X.509 digital certificate, and requests that DMZ proxy server 34 present its X.509 digital certificate by a return message. This handshaking is well understood in the art, and will not be elaborated on in any further detail. It is described, however, to emphasize that the X.509 digital certificate being presented to gateway proxy server 40 belongs to DMZ proxy server 34, not the user 18 of client computer 22. The commercially available software on DMZ proxy server 34 does not have built-in capabilities to perform this information forwarding step according to the Accordingly, as described above, plug-in 36 is invention. provided as part of the solution to this problem. The other part

of the solution, authorization plug-in 42, is configured, among other things, to extract the data embedded in the message from DMZ proxy server 34 corresponding to the data in the client's certificate. Plug-in 36 (capture and embed) and plug-in 42 (extract and parse) work hand-in-hand in passing the information in the client's digital certificate across firewall system 32 for authentication.

(Emphasis added). As such, Grantges discloses the establishment of a "secure connection" between "DMZ proxy server 34" and "gateway proxy server 40." However, simply disclosing that a "secure connection" is established between two entities does not provide any indication as to what information is sent over that "secure connection." Indeed, Grantges fails to disclose that a "client registration request," as claimed, is sent to the "DMZ proxy server 34" via that "secure connection," as seemingly alleged by the Examiner. The only communication from the "gateway 38" to the "DMZ server" disclosed by Grantges is the communication of its "digital certificate" during a handshaking protocol to ensure that the two entities are compatible. Communicating an "X.509 digital certificate" from the "gateway 38" to the "DMZ server" to ensure compatibility is not the same as communicating a "client registration request" from the "web servers 281 ... 283" of Grantges (which the Examiner has analogized to the claimed "remote proxy agent") across the firewall to the "DMZ server" (which the Examiner has analogized to the claimed "remote gateway agent").

Accordingly, as discussed above, Grantges fails to disclose a "remote gateway agent configured for: receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as recited in Claim 103 (and similar elements recited in Claims 114 and 125).

For at least the reasons discussed above, Appellant respectfully submits that Grantges fails to disclose at least one element recited in each of independent Claims 103,

114, and 125 (and their associated dependent claims). As such, Appellant respectfully requests the Board reverse the rejection.

IV. REJECTION OF CLAIMS 105, 116, and 127 UNDER 35 U.S.C. § 103(a)

On page 9 of the Final Office Action, Claims 105, 116, and 127 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Grantges in view of U.S. Patent Application Publication No. 2002/0118671 to Staples et al. (hereinafter "Staples"). Appellant respectfully requests the Board reverse the rejection.

Claims 105, 116, and 127 depend from independent Claims 103, 114, and 125, respectively. As discussed above, Grantges fails to disclose a "remote gateway agent configured for: receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as recited in Claim 103 (and similar elements recited in Claims 114 and 125). Appellant respectfully submits that Staples fails to cure the deficiencies of Grantges.

On page 10 of the Examiner's Answer, the Examiner relied on Staples merely for its alleged disclosure that "the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application." The Examiner fails to allege that Staples discloses a "remote gateway agent configured for: receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as recited in Claim 103, and indeed it does not.

Accordingly, Appellant respectfully submits that Claims 105, 116, and 127 are allowable over Grantges and Staples based at least on their dependency from allowable independent Claims 103, 114, and 125, respectively. As such, Appellant respectfully requests the Board reverse the rejection.

V. REJECTION OF CLAIMS 108, 113, 119, 124, 130, and 135 UNDER 35 U.S.C.§ 103(a)

On page 10 of the Final Office Action, Claims 108, 113, 119, 124, 130, and 135 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Grantges in view of U.S. Patent No. 6,711,611 to Hanhan (hereinafter "Hanhan"). Appellant respectfully requests the Board reverse the rejection.

Claims 108, 113, 119, 124, 130, and 135 depend variously from independent Claims 103, 114, and 125. As discussed above, Grantges fails to disclose a "remote gateway agent configured for: receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as recited in Claim 103 (and similar elements recited in Claims 114 and 125). Appellant respectfully submits that Hanhan fails to cure the deficiencies of Grantges.

On page 11 of the Examiner's Answer, the Examiner relied on Hanhan merely for its alleged disclosure that "the first network is a wireless network and the user device is a wireless device" and that "the gateway server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device." The Examiner fails to allege that Hanhan discloses a "remote gateway agent configured for:

receiving ... a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent," as recited in Claim 103, and indeed Hanhan does not.

Accordingly, Appellant respectfully submits that Claims 108, 113, 119, 124, 130, and 135 are allowable over Grantges and Hanhan based at least on their dependencies from one of allowable independent Claims 103, 114, and 125. As such, Appellant respectfully requests the Board reverse the rejection.

CONCLUSION

In view of the foregoing discussion and arguments, Appellant respectfully submits that Claims 103-135 are not properly rejected under 35 U.S.C. §§ 102(e) and 103(a). Accordingly, Appellant respectfully requests that the Board reverse these claim rejections.

Respectfully submitted,

Date February 23, 2011

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CLAIMS APPENDIX

1.-102. (Canceled)

103. (Previously Presented) A system for enabling remote access to applications residing on a processing system comprising:

a firewall system interposed between a first system and a second system, wherein the first system comprises:

a user device connected to a gateway via a first network, wherein the user device comprises a client; and

a gateway connected to an insecure side of the firewall via a second network, wherein the gateway comprises an instance of a remote gateway agent,

wherein the second system comprises:

a processing system connected to a secure side of the firewall, wherein the processing system comprises an instance of a remote proxy agent and at least one application, wherein the remote gateway agent is configured for:

receiving at the remote gateway agent a client registration request from the remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall between the remote proxy agent and the remote gateway agent;

receiving a request from the user device for a task to be performed by the at least one application residing on the processing system; and

forwarding the task request to the remote proxy agent residing on the processing system via the remote gateway agent, and

wherein the remote proxy agent comprises an interface to the at least one application and is configured for:

sending the client registration request to the remote gateway

agent;

receiving and analyzing the task request from the remote

gateway agent;

selecting and executing the at least one application via the interface to process the request; and

sending a result from the remote proxy agent to the remote gateway agent via the client-to-server connection through the firewall.

- 104. (Previously Presented) The system of claim 103, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
- 105. (Previously Presented) The system of claim 103, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 106. (Previously Presented) The system of claim 103, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
- 107. (Previously Presented) The system of claim 103, wherein the remote gateway agent is further configured for determining whether the user device is entitled to direct the request to the processing system.
- 108. (Previously Presented) The system of claim 103, wherein the first network is a wireless network and the user device is a wireless device.
- 109. (Previously Presented) The system of claim 103, wherein the second network is the Internet.
- 110. (Previously Presented) The system of claim 103, wherein the request specifies a serial execution of serial tasks and return of results.
- 111. (Previously Presented) The system of claim 103, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.

- 112. (Previously Presented) The system of claim 103, wherein the remote gateway agent is further configured for receiving the result, and sending at least part of the result to the user device via the first network.
- 113. (Previously Presented) The system of claim 112, wherein the gateway server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device.
- 114. (Previously Presented) A method for enabling remote data access to applications residing on a processing system comprising:

configuring a remote proxy agent on the processing system;

configuring a remote gateway agent on a gateway;

interposing a firewall between the processing system and the gateway, wherein the processing system resides on the secure side of the firewall and the gateway resides on the insecure side of the firewall;

receiving at the remote gateway agent a client registration request from a remote proxy agent, wherein the client registration request creates a client-to-server connection through the firewall;

registering the remote proxy agent with the remote gateway agent;

configuring an interface between the remote proxy agent and the at least one application residing on the processing system;

receiving at the remote gateway agent a request for access to the processing system from a user device via a first network;

forwarding the request for access to the processing system;

receiving and analyzing the request from the remote gateway agent at the remote proxy agent;

executing the selected application via the interface to process the request; and

sending a result from the remote proxy agent to the remote gateway agent via the client-to- server connection through the firewall.

- 115. (Previously Presented) The method of claim 114, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
- 116. (Previously Presented) The method of claim 114, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 117. (Previously Presented) The method of claim 114, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.
- 118. (Previously Presented) The method of claim 114 further comprising determining at the remote gateway agent whether the user device is entitled to direct the request to the processing system.
- 119. (Previously Presented) The method of claim 114, wherein the first network is a wireless network and the user device is a wireless device.
- 120. (Previously Presented) The method of claim 114, wherein the second network is the Internet.
- 121. (Previously Presented) The method of claim 114, wherein the request specifies a serial execution of serial tasks and return of results.
- 122. (Previously Presented) The method of claim 114, wherein a plurality of requests is sent to the one or more data processing computers in an un-interrupted data session.
- 123. (Previously Presented) The method of claim 114 further comprising receiving the result at the remote gateway agent and sending at least part of the result to the user device via the first network.

- 124. (Previously Presented) The method of claim 123 further comprising transcoding the result for viewing by the user device prior to sending the result to the user device.
- 125. (Previously Presented) A remote proxy agent residing in a processing system for enabling remote data access applications comprising:

a registration processor comprising instructions for sending a registration request to a remote gateway agent residing on a gateway via a first network, wherein the client registration request creates a client-to-server connection through a firewall interposed between the remote proxy agent and the remote gateway agent and wherein the gateway is accessible to a user device via a second network:

a request analyzer configured for receiving, parsing and verifying a task request forwarded by the remote gateway agent from the user device;

a request processor configured for processing the task request for taskperformance instructions;

an application program interface configured for sending the task-performance instruction to at least one application residing on the processing system; and

a results processor configured for sending a result from the software application to the remote gateway agent for forwarding to the user device.

- 126. (Previously Presented) The remote proxy agent of claim 125, wherein the processing system is selected from the group consisting of a personal computer, a multipurpose printing center, and a computer-connected peripheral.
- 127. (Previously Presented) The remote proxy agent of claim 125, wherein the at least one application is selected from the group consisting of an e-mail application, a word processing application, a facsimile application, a telephony application, and an operating system component application.
- 128. (Previously Presented) The remote proxy agent of claim 125, wherein the request is selected from the group consisting of searching a directory, opening a target file, accessing an e-mail application, sending a fax, reading a document over a dialed telephone connection, powering on a device connected to the one or more data processing computers, and powering off the device connected to the one or more data processing computers.

- 129. (Currently Amended) The remote proxy agent of claim 125, wherein the remote gateway agent is further configured for determining whether the user device is entitled to direct the request to the processing system.
- 130. (Previously Presented) The remote proxy agent of claim 125, wherein the second network is a wireless network and the user device is a wireless device.
- 131. (Previously Presented) The remote proxy agent of claim 125, wherein the first network is the Internet.
- 132. (Previously Presented) The remote proxy agent of claim 125, wherein the request specifies a serial execution of serial tasks and return of results.
- 133. (Previously Presented) The remote proxy agent of claim 125, wherein a plurality of requests is sent to the one or more data processing computers in an uninterrupted data session.
- 134. (Previously Presented) The remote proxy agent of claim 125, wherein the remote gateway agent is configured for receiving the result, and sending at least part of the result to the user device via the second network.
- 135. (Previously Presented) The remote proxy agent of claim 134, wherein the gateway server instance is further configured for transcoding the result for viewing by the user device prior to sending the result to the user device.

EVIDENCE APPENDIX

None.

RELATED PROCEEDINGS APPENDIX

None.